

|                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------|---------------------------|----------------------|--------|---|----|----|--------|----|----|----|--------|--|---|--|--------|---|---|---|--------|---|---|---|--------|----|----|----|----|----|----|----|--------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--------|--|--|--|--|--|---|---|---|---|---|--|--|--|--|--|--|--------|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--------|--|--|--|--|--|--|--|--|--|--|--|---|---|---|--|--|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|--|--|--|--|--|--|
|  | <div>Universitas Negeri Surabaya</div> <div>Fakultas Matematika dan Ilmu Pengetahuan Alam</div> <div>Program Studi S1 Sains Data</div>                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           | Kode Dokumen         |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| RENCANA PEMBELAJARAN SEMESTER                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| MATA KULIAH (MK)                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | KODE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Rumpun MK                                                                                                                                                                                                                                                                                                                                                                                                 | BOBOT (sks)                |       | SEMESTER                  | Tgl Penyusunan       |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| Matematika Diskrit                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 4920203010                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Mata Kuliah Wajib Program Studi                                                                                                                                                                                                                                                                                                                                                                           | T=3                        | P=0   | ECTS=4.77                 | 1<br>22 Agustus 2025 |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| OTORISASI                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Pengembang RPS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                           | Koordinator RMK            |       | Koordinator Program Studi |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
|                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Yuliani Puji Astuti, M.Si.; Yuni Rosita Dewi, M.Si.; Kartika Chandra Dewi, M.Si.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                           | Yuliani Puji Astuti, M.Si. |       | YULIANI PUJI ASTUTI       |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| Model Pembelajaran                                                                | Case Study                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| Capaian Pembelajaran (CP)                                                         | CPL-PRODI yang dibebankan pada MK                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
|                                                                                   | CPL-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Mengembangkan pemikiran logis, kritis, sistematis, dan kreatif dalam melakukan pekerjaan yang spesifik di bidang keahliannya serta sesuai dengan standar kompetensi kerja bidang yang bersangkutan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
|                                                                                   | CPL-19                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Mampu menerapkan pemikiran logis, kritis, sistematis, dan inovatif dalam mendesain, mengimplementasi dan mengevaluasi ilmu pengetahuan dan teknologi yang memperhatikan dan menerapkan nilai humaniora dalam bidang sains data.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
|                                                                                   | CPL-27                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Menguasai teori matematika, statistika, dan ilmu komputer/informatika                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
|                                                                                   | Capaian Pembelajaran Mata Kuliah (CPMK)                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
|                                                                                   | CPMK - 1                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Mahasiswa mampu memahami konsep logika proposisi dan implementasinya                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
|                                                                                   | CPMK - 2                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Mahasiswa mampu memahami implementasi ekuivalensi, predikat, kuantor, dan aturan inferensi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
|                                                                                   | CPMK - 3                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Mahasiswa mampu memahami konsep pembuktian dan induksi matematis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
|                                                                                   | CPMK - 4                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Mahasiswa mampu memahami konsep himpunan dan fungsi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
|                                                                                   | CPMK - 5                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Mahasiswa mampu memahami konsep notasi dan counting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
|                                                                                   | CPMK - 6                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Mahasiswa memahami dan mengimplementasikan konsep dasar graf dan tree                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
|                                                                                   | Matrik CPL - CPMK                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
|                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <table><tr><td>CPMK</td><td>CPL-3</td><td>CPL-19</td><td>CPL-27</td></tr><tr><td>CPMK-1</td><td>✓</td><td></td><td></td></tr><tr><td>CPMK-2</td><td>✓</td><td></td><td></td></tr><tr><td>CPMK-3</td><td></td><td>✓</td><td></td></tr><tr><td>CPMK-4</td><td></td><td></td><td>✓</td></tr><tr><td>CPMK-5</td><td></td><td></td><td>✓</td></tr><tr><td>CPMK-6</td><td></td><td>✓</td><td></td></tr></table> | CPMK                       | CPL-3 | CPL-19                    | CPL-27               | CPMK-1 | ✓ |    |    | CPMK-2 | ✓  |    |    | CPMK-3 |  | ✓ |  | CPMK-4 |   |   | ✓ | CPMK-5 |   |   | ✓ | CPMK-6 |    | ✓  |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| CPMK                                                                              | CPL-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                | CPL-19                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CPL-27                                                                                                                                                                                                                                                                                                                                                                                                    |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| CPMK-1                                                                            | ✓                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| CPMK-2                                                                            | ✓                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| CPMK-3                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ✓                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| CPMK-4                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ✓                                                                                                                                                                                                                                                                                                                                                                                                         |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| CPMK-5                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ✓                                                                                                                                                                                                                                                                                                                                                                                                         |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| CPMK-6                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ✓                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| Matrik CPMK pada Kemampuan akhir tiap tahapan belajar (Sub-CPMK)                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
|                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <table><tr><td rowspan="2">CPMK</td><td colspan="16">Minggu Ke</td></tr><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td></tr><tr><td>CPMK-1</td><td>✓</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>CPMK-2</td><td></td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>CPMK-3</td><td></td><td></td><td></td><td></td><td></td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>CPMK-4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>✓</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>CPMK-5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>✓</td><td>✓</td><td>✓</td><td></td><td></td></tr><tr><td>CPMK-6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>✓</td><td>✓</td></tr></table> | CPMK                                                                                                                                                                                                                                                                                                                                                                                                      | Minggu Ke                  |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  | 1      | 2 | 3 | 4 | 5      | 6 | 7 | 8 | 9      | 10 | 11 | 12 | 13 | 14 | 15 | 16 | CPMK-1 | ✓ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | CPMK-2 |  | ✓ | ✓ | ✓ | ✓ |  |  |  |  |  |  |  |  |  |  |  | CPMK-3 |  |  |  |  |  | ✓ | ✓ | ✓ | ✓ | ✓ |  |  |  |  |  |  | CPMK-4 |  |  |  |  |  |  |  |  |  |  | ✓ |  |  |  |  |  | CPMK-5 |  |  |  |  |  |  |  |  |  |  |  | ✓ | ✓ | ✓ |  |  | CPMK-6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ✓ | ✓ |  |  |  |  |  |  |
| CPMK                                                                              | Minggu Ke                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
|                                                                                   | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3                                                                                                                                                                                                                                                                                                                                                                                                         | 4                          | 5     | 6                         | 7                    | 8      | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16     |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| CPMK-1                                                                            | ✓                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| CPMK-2                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ✓                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ✓                                                                                                                                                                                                                                                                                                                                                                                                         | ✓                          | ✓     |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| CPMK-3                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       | ✓                         | ✓                    | ✓      | ✓ | ✓  |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| CPMK-4                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    | ✓  |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| CPMK-5                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    | ✓      | ✓  | ✓  |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| CPMK-6                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    | ✓  | ✓      |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |
| Deskripsi Singkat MK                                                              | Pada mata kuliah ini akan dipelajari konsep-konsep dalam matematika diskrit, antara lain logika, struktur diskrit dasar, dan analisis kombinatorik, yang menjadi dasar bagi topik-topik lanjutan dan aplikasinya pada bidang sains data. Dengan demikian mahasiswa akan memiliki pengalaman belajar untuk berfikir secara kritis dan mampu memberikan keputusan yang tepat tentang penggunaan konsep tersebut. Mata kuliah ini tidak memiliki mata kuliah prasyarat. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |                            |       |                           |                      |        |   |    |    |        |    |    |    |        |  |   |  |        |   |   |   |        |   |   |   |        |    |    |    |    |    |    |    |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |

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| Pustaka        | Utama :                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                |                                                                                       |                                                                                  |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                     |
|                | 1. Susanna, S.Epp, Discrete Mathematics with Applications, 5th Edition, Cengage, 2020.<br>2. Lewis, H. and Zax, R., Essential Discrete Mathematics For Computer Science, Princeton University Press, 2019<br>3. Rosen, Kenneth H. Discrete Mathematics and its Applications 8th Edition, Mc Graw Hill Education, 2019 |                                                                                                                                                                                                                                                                                                                                |                                                                                       |                                                                                  |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                     |
|                | Pendukung :                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                |                                                                                       |                                                                                  |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                     |
|                |                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                |                                                                                       |                                                                                  |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                     |
| Dosen Pengampu | Yuliani Puji Astuti, S.Si., M.Si.<br>Belgis Ainatul Iza, S.Si, M.Mat.<br>Harmon Prayogi, M.Sc.<br>Dr. Heri Purnawan, S.Si., M.Si.<br>Kartika Chandra Dewi, S.Si., M.Si.<br>Riskyana Dewi Intan Puspitasari, M.Kom.<br>Yuni Rosita Dewi, M.Si.<br>Nurul Laili, S.Pd., M.Sc.                                            |                                                                                                                                                                                                                                                                                                                                |                                                                                       |                                                                                  |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                     |
| Mg Ke-         | Kemampuan akhir tiap tahapan belajar (Sub-CPMK)                                                                                                                                                                                                                                                                       | Penilaian                                                                                                                                                                                                                                                                                                                      |                                                                                       | Bantuk Pembelajaran, Metode Pembelajaran, Penugasan Mahasiswa, [ Estimasi Waktu] |                 | Materi Pembelajaran [ Pustaka ]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Bobot Penilaian (%) |
|                |                                                                                                                                                                                                                                                                                                                       | Indikator                                                                                                                                                                                                                                                                                                                      | Kriteria & Bentuk                                                                     | Luring (offline)                                                                 | Daring (online) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                     |
| (1)            | (2)                                                                                                                                                                                                                                                                                                                   | (3)                                                                                                                                                                                                                                                                                                                            | (4)                                                                                   | (5)                                                                              | (6)             | (7)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | (8)                 |
| 1              | Mahasiswa memahami konsep logika beserta implementasinya                                                                                                                                                                                                                                                              | 1.Mampu menjelaskan konsep logika proposisi<br>2.Mampu menjelaskan operator logika<br>3.Mampu menjelaskan tabel kebenaran<br>4.Mampu membedakan pernyataan kondisional<br>5.Mampu mengimplementasikan logika proposisi dalam masalah sehari-hari<br>6.Mampu mengimplementasikan operator logika pada rangkaian logika digital. | Kriteria:<br>1.Non-Tes<br>2.Tugas<br><br>Bentuk Penilaian :<br>Aktifitas Partisipatif | Pembelajaran Kolaboratif (Ceramah, diskusi, dan tanya jawab)<br>3 X 50 menit     |                 | Materi: Logika Proposisi, Pernyataan kondisional, Operasi pada Logika Proposisi, Tabel kebenaran, dan Aplikasi logika proposisi<br>Pustaka:<br>Susanna, S.Epp, Discrete Mathematics with Applications, 5th Edition, Cengage, 2020                                                                                                                                                                                                                                                                                               | 2%                  |
| 2              | Mahasiswa memahami implementasi ekuivalensi proposisi, predikat, dan kuantor                                                                                                                                                                                                                                          | 1.Mampu menjelaskan konsep logika predikat<br>2.Mampu menjelaskan konsep kuantor Universal & Eksistensial<br>3.Mampu menjelaskan negasi pada formula logika predikat<br>4.Mampu menjelaskan translasi pada formula logika predikat                                                                                             | Kriteria:<br>1.Non-Tes<br>2.Tugas<br><br>Bentuk Penilaian :<br>Aktifitas Partisipatif | Pembelajaran Kolaboratif (Ceramah, diskusi, dan tanya jawab)<br>3 X 50 menit     |                 | Materi: Logika predikat,Kuantor Universal, Kuantor Eksistensial, Negasi pada formula logika predikat, dan Translasi pada formula logika predikat<br>Pustaka:<br>Susanna, S.Epp, Discrete Mathematics with Applications, 5th Edition, Cengage, 2020<br><br>Materi: Logika predikat,Kuantor Universal, Kuantor Eksistensial, Negasi pada formula logika predikat, dan Translasi pada formula logika predikat<br>Pustaka:<br>Rosen, Kenneth H. Discrete Mathematics and its Applications 8th Edition, Mc Graw Hill Education, 2019 | 3%                  |

|   |                                             |                                                                                                                                                                                                                                                                     |                                                                                               |                                                                           |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |
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| 3 | Mahasiswa memahami konsep kuantor bersarang | 1.Mampu menjelaskan konsep dari Kuantor bersarang (nested)<br>2.Mampu menjelaskan translasi pada formula logika predikat bersarang                                                                                                                                  | <b>Kriteria:</b><br>Tugas Individu<br><br><b>Bentuk Penilaian :</b><br>Aktifitas Partisipasif | Pembelajaran Kolaboratif (Ceramah, diskusi, dan tanya jawab) 3 x 50 menit |  | <b>Materi:</b> Kuantor bersarang, translasi kuantor<br><b>Pustaka:</b><br><i>Susanna, S.Epp, Discrete Mathematics with Applications, 5th Edition, Cengage, 2020</i><br><br><b>Materi:</b> Kuantor bersarang, translasi kuantor<br><b>Pustaka:</b><br><i>Rosen, Kenneth H. Discrete Mathematics and its Applications 8th Edition, Mc Graw Hill Education, 2019</i>                                                                                                                                                                                                                                                                                                               | 3% |
| 4 | Mahasiswa memahami konsep aturan inferensi  | 1.Mampu menjelaskan konsep argumen pada logika proposisi<br>2.Mampu menjelaskan konsep aturan inferensi<br>3.Mampu menjelaskan konsep Modus Ponens, Modus Tolens, Silogisme Hipotetik, Silogisme Disjungtif, Penambahan, Simplifikasi, Konjungsi, Resolusi, Fallacy | <b>Kriteria:</b><br>Non-Tes<br><br><b>Bentuk Penilaian :</b><br>Aktifitas Partisipasif        | Pembelajaran Kolaboratif (Ceramah, diskusi, dan tanya jawab) 3 X 50 menit |  | <b>Materi:</b><br>Argumen pada logika proposisi, Aturan inferensi, Modus Ponens, Modus Tolens, Silogisme Hipotetik, Silogisme Disjungtif, Penambahan, Simplifikasi, Konjungsi, Resolusi, Fallacy<br><b>Pustaka:</b> <i>Lewis, H. and Zax, R., Essential Discrete Mathematics For Computer Science, Princeton University Press, 2019</i><br><br><b>Materi:</b><br>Argumen pada logika proposisi, Aturan inferensi, Modus Ponens, Modus Tolens, Silogisme Hipotetik, Silogisme Disjungtif, Penambahan, Simplifikasi, Konjungsi, Resolusi, Fallacy<br><b>Pustaka:</b> <i>Rosen, Kenneth H. Discrete Mathematics and its Applications 8th Edition, Mc Graw Hill Education, 2019</i> | 3% |

|   |                                                                                                                              |                                                                                                                                                                                                                    |                                                                                                     |                                                                           |  |                                                                                                                                                                                                                                                                                                                                                                      |     |
|---|------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 5 | Mahasiswa memahami konsep aturan inferensi                                                                                   | 1.Mampu menjelaskan konsep logika dan implementasinya<br>2.Mampu menjelaskan dan mengimplementasikan konsep ekuivalensi, predikat dan kuantor                                                                      | <b>Kriteria:</b><br>Kuis<br><br><b>Bentuk Penilaian</b><br>: Aktifitas Partisipasif, Tes            | Pembelajaran Kolaboratif (Ceramah, diskusi, dan tanya jawab) 3 X 50 menit |  | <b>Materi:</b> Logika, Aturan Inferensi, Ekuivalensi, Predikat, dan Kuantor<br><b>Pustaka:</b><br><i>Susanna, S.Epp, Discrete Mathematics with Applications, 5th Edition, Cengage, 2020.</i>                                                                                                                                                                         | 15% |
| 6 | Mampu memahami konsep pembuktian langsung                                                                                    | Mampu menjelaskan konsep Lemma, Teorema, Corollary, Conjecture                                                                                                                                                     | <b>Kriteria:</b><br>Non-Tes<br><br><b>Bentuk Penilaian</b><br>: Aktifitas Partisipasif              | Pembelajaran Kolaboratif (Ceramah, diskusi, dan tanya jawab) 3 X 50 menit |  | <b>Materi:</b> Lemma, Teorema, Corollary, Conjecture<br><b>Pustaka:</b><br><i>Susanna, S.Epp, Discrete Mathematics with Applications, 5th Edition, Cengage, 2020.</i><br><br><b>Materi:</b> Lemma, Teorema, Corollary, Conjecture<br><b>Pustaka:</b><br><i>Rosen, Kenneth H. Discrete Mathematics and its Applications 8th Edition, Mc Graw Hill Education, 2019</i> | 3%  |
| 7 | Mampu menjelaskan konsep Teorema Pembuktian Trivial, Pembuktian Vacuous, Pembuktian Langsung, Pembuktian dengan Kontraposisi | 1.Mampu memahami konsep Teorema Pembuktian Trivial<br>2.Mampu menjelaskan konsep Pembuktian Vacuous<br>3.Mampu menjelaskan konsep Pembuktian Langsung<br>4.Mampu menjelaskan konsep Pembuktian dengan Kontraposisi | <b>Kriteria:</b><br>1.Non-Tes<br>2.Tugas<br><br><b>Bentuk Penilaian</b><br>: Aktifitas Partisipasif | Pembelajaran Kolaboratif (Ceramah, diskusi, dan tanya jawab) 3 X 50 menit |  | <b>Materi:</b> Teorema Pembuktian Trivial, Pembuktian Vacuous, Pembuktian Langsung, Pembuktian dengan Kontraposisi<br><b>Pustaka:</b><br><i>Susanna, S.Epp, Discrete Mathematics with Applications, 5th Edition, Cengage, 2020.</i>                                                                                                                                  | 3%  |
| 8 | Ujian Tengah Semester (UTS)                                                                                                  | Ujian Tes Tulis                                                                                                                                                                                                    | <b>Kriteria:</b><br>Ujian Tulis<br><br><b>Bentuk Penilaian</b><br>: Tes                             | Ujian Tulis Offline 100 menit                                             |  | <b>Materi:</b> Semua materi sebelum UTS<br><b>Pustaka:</b><br><i>Susanna, S.Epp, Discrete Mathematics with Applications, 5th Edition, Cengage, 2020</i><br><br><b>Materi:</b> Semua materi sebelum UTS<br><b>Pustaka:</b><br><i>Rosen, Kenneth H. Discrete Mathematics and its Applications 8th Edition, Mc Graw Hill Education, 2019</i>                            | 15% |

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| 9  | Pembuktian dengan Kontradiksi, Pembuktian Bikondisional, Pembuktian dengan kasus Counterexample | 1.Mampu menjelaskan konsep pembuktian dengan kontradiksi<br>2.Mampu menjelaskan konsep pembuktian dengan bikondisional<br>3.Mampu menjelaskan konsep pembuktian dengan kasus counter example                                                  | <b>Kriteria:</b><br>Non-Tes<br><br><b>Bentuk Penilaian :</b><br>Aktifitas Partisipasif     | Pembelajaran Kolaboratif (Ceramah, diskusi, dan tanya jawab)<br>3 X 50 menit |  | <b>Materi:</b><br>Pembuktian dengan Kontradiksi, Bikondisional, dan Counter Example<br><b>Pustaka:</b><br><i>Susanna, S.Epp, Discrete Mathematics with Applications, 5th Edition, Cengage, 2020.</i>                                  | 3% |
| 10 | Mahasiswa memahami konsep barisan dan deret, prinsip induksi matematika, konsep rekursi         | 1.Mampu menjelaskan konsep deret<br>2.Mampu menjelaskan prinsip induksi matematika<br>3.Mampu menjelaskan konsep pembuktian deduktif<br>4.Mampu menjelaskan konsep rekursi                                                                    | <b>Kriteria:</b><br>Tugas<br><br><b>Bentuk Penilaian :</b><br>Aktifitas Partisipasif       | Pembelajaran Kolaboratif (Ceramah, diskusi, dan tanya jawab)<br>3 X 50 menit |  | <b>Materi:</b> Konsep Pembuktian Deduktif, Prinsip Induksi Matematika<br><b>Pustaka:</b><br><i>Susanna, S.Epp, Discrete Mathematics with Applications, 5th Edition, Cengage, 2020.</i>                                                | 3% |
| 11 | Mahasiswa memahami konsep himpunan dan fungsi                                                   | 1.Mampu menjelaskan konsep himpunan<br>2.Mampu menjelaskan konsep fungsi                                                                                                                                                                      | <b>Kriteria:</b><br>Non-Tes<br><br><b>Bentuk Penilaian :</b><br>Aktifitas Partisipasif     | Pembelajaran Kolaboratif (Ceramah, diskusi, dan tanya jawab)<br>3 X 50 menit |  | <b>Materi:</b><br>Himpunan, Fungsi, Barisan Aritmatika, Barisan Geometri, Kardinalitas Himpunan<br><b>Pustaka:</b><br><i>Susanna, S.Epp, Discrete Mathematics with Applications, 5th Edition, Cengage, 2020.</i>                      | 3% |
| 12 | Mahasiswa memahami konsep counting                                                              | 1.Mampu menjelaskan konsep aturan penjumlahan<br>2.Mampu menjelaskan konsep aturan perkalian<br>3.Mampu menjelaskan konsep permutasi<br>4.Mampu menjelaskan konsep kombinasi                                                                  | <b>Kriteria:</b><br>Partisipasi<br><br><b>Bentuk Penilaian :</b><br>Aktifitas Partisipasif | Pembelajaran Kolaboratif (Ceramah, diskusi, dan tanya jawab)<br>3 X 50 menit |  | <b>Materi:</b> Aturan Penjumlahan, Aturan Perkalian, Permutasi, Kombinasi<br><b>Pustaka:</b><br><i>Susanna, S.Epp, Discrete Mathematics with Applications, 5th Edition, Cengage, 2020.</i>                                            | 3% |
| 13 | Mahasiswa memahami konsep Pigeonhole, Binomial dan prinsip inklusi-eksklusi                     | 1.Mampu menjelaskan konsep prinsip Pigeonhole<br>2.Mampu menjelaskan konsep binomial<br>3.Mampu menjelaskan konsep generalisasi permutasi<br>4.Mampu menjelaskan konsep generalisasi kombinasi<br>5.Mampu menjelaskan konsep inklusi-eksklusi | <b>Kriteria:</b><br>Partisipasi<br><br><b>Bentuk Penilaian :</b><br>Aktifitas Partisipasif | Pembelajaran Kolaboratif (Ceramah, diskusi, dan tanya jawab)<br>3 X 50 menit |  | <b>Materi:</b> Prinsip Pigeonhole, Binomial, Generalisasi Permutasi, Generalisasi Kombinasi, Konsep Inklusi-Eksklusi<br><b>Pustaka:</b><br><i>Susanna, S.Epp, Discrete Mathematics with Applications, 5th Edition, Cengage, 2020.</i> | 3% |

|    |                                                                          |                                                                                                                                                          |                                                                                                       |                                                                           |  |                                                                                                                                                                                                                                                                                      |     |
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| 14 | Mahasiswa memahami konsep prinsip inklusi-eksklusi                       | 1..Mampu menjelaskan konsep dan prinsipprinsip inklusi-eksklusi<br>2..Mampu menjelaskan aplikasi dari prinsip inklusi-eksklus                            | <b>Kriteria:</b><br>Ujian Tulis<br><br><b>Bentuk Penilaian</b><br>:<br>Aktifitas<br>Partisipasif, Tes | Pembelajaran Kolaboratif (Ceramah, diskusi, dan tanya jawab) 3 X 50 menit |  | <b>Materi:</b> Konsep deret hingga prinsip rekursif<br><b>Pustaka:</b><br><i>Susanna, S.Epp, Discrete Mathematics with Applications, 5th Edition, Cengage, 2020.</i>                                                                                                                 | 15% |
| 15 | Mahasiswa mampu menjelaskan konsep graf dan tree beserta implementasinya | 1.Mahasiswa mampu menjelaskan konsep graf<br>2.<br>3.Mahasiswa mampu menjelaskan model dan jenis-jenis graf<br>4.Mahasiswa mampu menjelaskan konsep tree | <b>Kriteria:</b><br>Non-Tes<br><br><b>Bentuk Penilaian</b><br>:<br>Aktifitas<br>Partisipasif          | Pembelajaran Kolaboratif (Ceramah, diskusi, dan tanya jawab) 3 x 50 menit |  | <b>Materi:</b> Konsep dasar graf, Model dan jenis-jenis graf, terminologi dari graf, representasi graf, konsep tree, tree transversal, spanning tree, aplikasi tree<br><b>Pustaka:</b><br><i>Susanna, S.Epp, Discrete Mathematics with Applications, 5th Edition, Cengage, 2020.</i> | 3%  |
| 16 | Ujian Akhir Semester (UAS)                                               | Tes Tulis                                                                                                                                                | <b>Kriteria:</b><br>Ujian Akhir Semester<br><br><b>Bentuk Penilaian</b><br>:<br>Tes                   | Ujian Tulis 100 menit                                                     |  | <b>Materi:</b> Semua materi<br><b>Pustaka:</b><br><i>Susanna, S.Epp, Discrete Mathematics with Applications, 5th Edition, Cengage, 2020</i>                                                                                                                                          | 20% |

#### Rekap Persentase Evaluasi : Case Study

| No | Evaluasi               | Persentase |
|----|------------------------|------------|
| 1. | Aktifitas Partisipasif | 50%        |
| 2. | Tes                    | 50%        |
|    |                        | 100%       |

#### Catatan

1. **Capaian Pembelajaran Lulusan Prodi (CPL - Prodi)** adalah kemampuan yang dimiliki oleh setiap lulusan prodi yang merupakan internalisasi dari sikap, penguasaan pengetahuan dan ketrampilan sesuai dengan jenjang prodinya yang diperoleh melalui proses pembelajaran.
2. **CPL yang dibebankan pada mata kuliah** adalah beberapa capaian pembelajaran lulusan program studi (CPL-Prodi) yang digunakan untuk pembentukan/pengembangan sebuah mata kuliah yang terdiri dari aspek sikap, ketrampilan umum, ketrampilan khusus dan pengetahuan.
3. **CP Mata kuliah (CPMK)** adalah kemampuan yang dijabarkan secara spesifik dari CPL yang dibebankan pada mata kuliah, dan bersifat spesifik terhadap bahan kajian atau materi pembelajaran mata kuliah tersebut.
4. **Sub-CPMK Mata kuliah (Sub-CPMK)** adalah kemampuan yang dijabarkan secara spesifik dari CPMK yang dapat diukur atau diamati dan merupakan kemampuan akhir yang direncanakan pada tiap tahap pembelajaran, dan bersifat spesifik terhadap materi pembelajaran mata kuliah tersebut.
5. **Indikator penilaian** kemampuan dalam proses maupun hasil belajar mahasiswa adalah pernyataan spesifik dan terukur yang mengidentifikasi kemampuan atau kinerja hasil belajar mahasiswa yang disertai bukti-bukti.
6. **Kreteria Penilaian** adalah patokan yang digunakan sebagai ukuran atau tolok ukur ketercapaian pembelajaran dalam penilaian berdasarkan indikator-indikator yang telah ditetapkan. Kreteria penilaian merupakan pedoman bagi penilai agar penilaian konsisten dan tidak bias. Kreteria dapat berupa kuantitatif ataupun kualitatif.
7. **Bentuk penilaian:** tes dan non-tes.
8. **Bentuk pembelajaran:** Kuliah, Responsi, Tutorial, Seminar atau yang setara, Praktikum, Praktik Studio, Praktik Bengkel, Praktik Lapangan, Penelitian, Pengabdian Kepada Masyarakat dan/atau bentuk pembelajaran lain yang setara.
9. **Metode Pembelajaran:** Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative Learning, Collaborative Learning, Contextual Learning, Project Based Learning, dan metode lainnya yg setara.
10. **Materi Pembelajaran** adalah rincian atau uraian dari bahan kajian yg dapat disajikan dalam bentuk beberapa pokok dan sub-pokok bahasan.
11. **Bobot penilaian** adalah prosentasi penilaian terhadap setiap pencapaian sub-CPMK yang besarnya proposional dengan tingkat kesulitan pencapaian sub-CPMK tsb., dan totalnya 100%.
12. TM=Tatap Muka, PT=Penugasan terstruktur, BM=Belajar mandiri.

RPS ini telah divalidasi pada tanggal 3 Mei 2024

Koordinator Program Studi S1  
Sains Data



YULIANI PUJI ASTUTI  
NIDN 0031077804

**UPM** Program Studi S1 Sains  
Data



NIDN 0021059403

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